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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,546	07/18/2001	Mitsugu Yoshihiro	450108-02834	5318

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EXAMINER

KAPADIA, VARSHA A

ART UNIT PAPER NUMBER

2651

DATE MAILED: 12/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/889,546

Applicant(s)

YOSHIHIRO, MITSUGU

Examiner

Varsha A. Kapadia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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This office action is responsive to the amendment filed on September 15, 2005.

Rejection Under 35 U.S.C. 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-3 and 5- 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arimura et al in view of Yao et al (5, 802, 243), Ikushima et al (5,311,375), Oguro (5,907,656) and further in view of Frary et al (5,971,281).

With regards to claims 1, 5-6 and 8, Arimura et al discloses a magnetic tape recording/reproducing device comprising: driving means...a buffer memory for temporarily holding the video data, counting a rate of change of a current data quantity stored in the buffer memory to an entire memory capacity, and supplying the rate of change to a driving control means (see col.3 lines 7-45), an interface... and driving control means...; and memory write/read means (see fig.1 , abstract and col.4 lines 1-24). Arimura et al further discloses driving control means for controlling the running speed of the video tape by the driving means in accordance with the quantity of data stored in the buffer memory and the rate of change of the current quantity stored in the memory (see col.3 lines 7-45).

Arimura et al fails to further specify that the device is operable to perform a variable speed reproduction in which all of the video data recorded on the tape is reproduced by changing the tape running speed without changing the drum rotation speed.

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Yao et al., however discloses a device wherein video data are recorded by the plurality of heads is reproduced by changing the tape running speed without changing the drum rotation speed (see fig.1 disclosure thereof and col.2 lines 10-15).

It would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the recording/reproducing apparatus disclosed by Arimura et al with the above teachings from Yao et al in order to provide a recording/reproducing device having a capability to keep the drum speed unchanged while changing the tape running speed in order to provide a system with inexpensive and readily available tape transport and servo mechanisms, as taught by Yao et al.

Arimura et al in view of Yao et al. fails to further specify that the magnetic heads are arranged in pairs such that the heads in each pair are spaced apart by about one track width, and the heads in each pair have about the same azimuth angle.

However, such arrangement is disclosed by Ikushima et al. (see for example, abstract, figs. 5-6 and disclosure thereof), wherein Ikushima et al further specifies that the video data recorded on the video tape is in the form of multiple tracks.

It would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the recording/reproducing apparatus disclosed by Arimura et al in view of Yao et al. with the above teachings from Ikushima et al in order to provide a recording/reproducing device having specific head arrangement that will eliminate the effect of the cross talk between the neighboring tracks and which will provide a proper image even when a high speed reproduction mode is selected, as taught by Ikushima et al. (see col. 3 lines 40-47).

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Arimura et al in view of Yao et al and Ikushima et al. fails to further disclose that the video tape is housed within a cassette that includes a non-contact type buffer memory for storing a list of contents of the video tape.

However, the video tape housed within a cassette that includes a non-contact type buffer memory for storing a list of contents of the video tape is well known and widely used in the art. Oguro for example discloses such in figs.8, 23 disclosure thereof and col.4 line 50 to col.5 line 10; wherein Oguro also discloses that the data from the memory is recorded/reproduced in accordance with the data operation of the tape.

It would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the recording/reproducing apparatus disclosed by Arimura et al in view of Yao et al. and Ikushima et al with the above teachings from Oguro in order to provide a recording/reproducing device having video tape housed within a cassette that includes a buffer memory for storing a list of contents of the video tape to provide a capability of quickly accessing specific data location without effecting the data density.

Oguro is silent on non-contact type buffer memory with a driving function for controlling the (buffer) memory. Frary et al is relied upon for teaching a non-contact type memory with the driving function for controlling the memory (see col.5 lines 61 to col.6 line 27 and col.7 lines 25-54 of Frary et al.

It would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the recording/reproducing apparatus including the cassette having a memory disclosed by Arimura et al in view of Yao et al. ,Ikushima et al and Oguro with the non contact

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type memory having a driving function as taught by Frary et al. in order to provide a fine tuning alignment of the cartridge accessing as suggested in col.7 lines 24-39 of Frary et al.

With regards to claims 2-3 and 7, Arimura et al further discloses that the driving control means is controlled in such a manner that, when the data quantity stored in the buffer memory is larger than the predetermined value, the video tape running speed is lowered and vice versa. (see figs. 4A and 4B and col.5 line 50 to col.6 line 64; wherein Arimura et al also discloses the capability of temporarily suspending the running of the tape and re-starting the motion of the tape again when the data in the buffer becomes higher than the set value).

2. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arimura et al in view of Yao et al, Ikushima et al, Oguro, Frary et al and in further in view of Beavers et al (6,307,701).

With regards to claim 4, Arimura et al in view of Yao et al, Ikushima et al, Oguro and Frary et al discloses the invention as described above in this office action. Arimura et al in view of Yao et al, Ikushima et al, Oguro and Frary et al fails to further clarify that driving control means controls the driving means so that the video tape is returned by a fixed distance in the opposite direction to be ready for restarting the next recording after the running of the video tape temporarily brought to a stop.

Beavers et al however, disclose such a capability (see col.2 lines10-15).

It would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the recording/reproducing apparatus disclosed by Arimura et al in view of Yao et al, Ikushima et al and Oguro and Frary et al. with the above teachings from Beavers et al

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in order to provide a capability to return the video tape by a fixed distance, in an opposite direction to be ready to restart after it has brought to temporary stop to allow enough space to accelerate to the forward operating speed, as taught by Beavers et al.

Response to Remarks

Applicant's arguments with respect to claims 1-8 have been considered but are not persuasive because: Applicant argue that the counting a rate of change of a current data quantity stored in the buffer memory to an entire capacity and supplying the rate of change to a driving control means as recited in the claim is not disclosed by the references relied upon. Examiner respectfully disagree because as pointed out above in this office action reference to Arimura et al discloses such feature along with the driving control means as recited in the claim (see col.3 lines 7-45 for example). In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, examiner as described above in this office action indicated specific portion of the references relied upon along with the motivation to combine the references.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the

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time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971)


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Varsha A. Kapadia whose telephone number is (571)272-7557. The examiner can normally be reached on Mon Tue and Thurs. from 6:30 AM to 2:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 571 272 7843. The fax phone number for the organization where this application or proceeding is assigned is 571 273 8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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